ECE SOPs - required paperwork for 590 students
Effective June 2020 until further notice

- All paperwork must be turned in hard copy form, or electronic form, to Ed Tech, Ms. Julie Samples, Span 402, 831-656-1155, Julie.samples@nps.edu. Please contact Ms. Samples for specifics.

- Paperwork turned in to the Ed Tech will be placed in your student file in Span 402. Contact Julie if you need access to your file.

- All forms are available on the ECE website www.nps.edu/ece under the FAQ/Practicalities section. Academic ECE Program Related Forms such as degree checklists, certificate enrollment form, etc...can also be accessed from the SAKAI ECE0000 Guide (cle.nps.edu → Active Sites → EC0000).

- Students: DO NOT fill in your Python matrix. The Education Technician is responsible for doing so once your program has been approved by your AA (Academic Associate) and PO (Program Officer).

1. To get your Python matrix signed:
   Paperwork required:
   - Filled Undergraduate checklist.
   - Working copy of the Undergraduate checklist (the working copy you may have filled in with your AA during your first quarter).
   - Filled MSEE/EE Checklist.
   - Transcripts (undergraduate, JST – for US students).
   - Planned Course matrix spreadsheet.

   Upon approval by your AA, the Education Technician will enter courses in your Python matrix. Please do NOT enter courses yourselves.

2. To get your Undergraduate equivalence signed:
   Paperwork required:
   For BSEE Degree holders:
   - Filled and signed Front page of the Undergraduate checklist.
   - Undergraduate transcripts.

   For Non BSEE Degree holders:
   - Filled Undergraduate checklist.
   - Transcripts (undergraduate, NPS, JST – for US students if applicable).
   - Python matrix.
   - Working copy of the Undergraduate checklist (the working copy you may have filled in with your AA during your first quarter).

3. To get your 6-month review done:
   Paperwork required:
   - Either a) Signed Undergraduate equivalence or b) filled undergraduate equivalence and working copy of the undergraduate checklist.
   - Transcripts (undergraduate, NPS, JST – for US students).
   - Python matrix.
4. To get your final MSEE/EE checklist signed (graduating quarter only)
   Paperwork required:
   - Either a) Signed Undergraduate equivalence or b) filled undergraduate equivalence and working copy of the undergraduate checklist.
   - Transcripts (undergraduate, NPS, JST – for US students if applicable).
   - Python matrix.
   - Filled final MSEE/EE Checklist.
   - For USN only: copy of thesis abstract and title.

5. To get enrolled in certificates:
   Paperwork required:
   - Get the Academic Certificate Enrollment Request form from the EC Dept Ed Tech
   - Filled certificate enrollment form (also available at back of MSEE Checklist).
   - Python matrix with courses for certificates highlighted.

6. To get enrolled in an EC4900 Independent Study
   - Get the form from the EC Dept Ed Tech and filled by the EC instructor and turn in to Ed Tech NLT end of first week of the quarter.
   - Note: Independent studies led by non-EC instructors requires the independent study form from the instructor’s department.
   - EC4900 slots are Pass/Fail only – they are NOT considered graded credits and do NOT count towards meeting minimum graded credit requirements.
   - Only one EC4900 slot may be counted towards meeting minimum degree requirements
   - You are required to produce and provide a report to your instructor at the end of the study.

7. To enroll in the Electrical Engineer’s (EE) Degree Program
   Paperwork required:
   - Filled EE checklist
   - Filled undergraduate checklist
   - Planned Python matrix
   - EE Degree application form (ECE website)
   - Undergraduate and NPS transcripts
   - Turn in to Ed Tech NLT 1 year prior to expected graduation.

8. Graduating students ➔ follow instructions shown in ECE SAKAI Student Guide (Timeline Section)

9. Tips on filling out the Undergraduate Equivalence form (applicable for NON BSEE/BSECE degree graduates only)
   - Only courses taken at or accepted by a university/college level are acceptable (high school courses not acceptable).
   - Training courses taken during military assignments: Only those evaluated by ACE to be equivalent to undergraduate courses are acceptable, when relevant to your program of study. Such courses are part of your Joint-Service-Transcripts (JST) transcripts, and can be accessed by
going to https://jst.doded.mil/jst/. All US students without a BSEE/BSCE degree will need to pull their JST transcripts and bring them to their AA to evaluate whether credits can be used (which will decrease the required NPS workload)

- Semester / quarter credits conversion: one semester credit is equal to 1.5 quarter credits.

**Section 1.B - Mathematics Section:**

- Note: All incoming ECE students will be required to enroll in the math refresher courses (MA1113, MA1114, MA1115, MA1116), unless they graduated within the last 24 months or validate these courses prior to the beginning of their first quarter at NPS. Validation is handled by the course coordinators for the Math courses. Validation can be done either with the transcripts (for recent course completion), or via an exam administered by the course coordinators.

Undergraduate equivalence completion requires completion, either at NPS or in previous academic undergraduate studies of:

- At least one course in differential equations - MA2121 or equivalent at NPS
- At least one course in linear algebra - MA2043 or equivalent at NPS
- At least one course in statistics - OS3604 or equivalent at NPS
- At least one course in probability and random variables as applied to EE (ABET requirements) – EC2010 at NPS
- Complex variables are covered in numerous ECE courses, thus indicate “ various NPS EC courses on the appropriate line)

**Section II.A – Basic Sciences**

- Basic sciences consist of chemistry and physics and other natural sciences including life, earth, and space sciences.
- Physics courses are to be included both in Section II.A and Section II.B.

**Section II.C – Computing Science**

Depending on your background and undergraduate transcripts, you may be given the option to validate the requirement to take AE/EC2440. A validated course indicates that you have the knowledge equivalent to after having taken the course, and the validated AE/EC2440 course may be used to satisfy Section II.C requirements.

**Section III – Engineering Science and Engineering Design**

- Section III.A – contains ONLY courses with electrical engineering topics, even though in some cases they may have been taken in a non EC Department. For example, control courses, computer architecture courses, computer networking courses, machine power courses may be acceptable. For example, control courses offered by the USNA Weapons, Robotics, and Control Engineering Department (previously named the Systems Engineering Department) are likely to be accepted as EE courses. Your AA will evaluate specifics of the courses with you.
- Section III.B – contains courses with NON electrical engineering topics only.
- Section III.D - a half page describing your engineering senior design project is required. All students without an engineering undergraduate degree must take the NPS EC senior design course (EC2220).

**Section IV – General Education**
General education courses include history, philosophy, fine arts, psychology, foreign language, political science, anthropology, and economics. ROTC-specific courses and any course not accepted towards meeting undergraduate degree requirements are not acceptable.